

IN THE CLAIMS:

1. (Previously Presented) A method for ameliorating or reducing the rate of ocular neovascularization in an individual afflicted with ocular neovascularization, comprising:

directly administering to the eye or eyes of said individual a lentiviral vector that operably encodes and expresses a functionally active endostatin wherein said administering ameliorates or reduces the rate of ocular neovascularization.

2. (Previously Presented) The method of claim 1, wherein the endostatin is a polypeptide with the amino acid sequence set forth in SEQ ID NO:1.

3. (Presently Presented) The method of claim 1, wherein the endostatin is a functionally active polypeptide fragment of the polypeptide with the amino acid sequence set forth in SEQ ID NO:1, a functionally active derivative of the polypeptide with the amino acid sequence set forth in SEQ ID NO:1, or a functionally active variant of the polypeptide with the amino acid sequence set forth in SEQ ID NO:1.

4-26. (Canceled)

27. (Previously Presented) The method of claim 1, wherein endostatin-encoding nucleic acid in said lentiviral vector comprises the sequence set forth in SEQ ID NO:2.

28. (Previously Presented) The method of claim 1 wherein the ocular neovascularization is caused by a member selected from the group consisting of macular degeneration, histoplasmosis, pathological myopia, angioid streaks, anterior ischemic optic neuropathy, bacterial endocarditis, Best's disease, birdshot retinochoroidopathy, choroidal hemangioma, choroidal nevi, choroidal nonperfusion, choroidal osteomas, choroidal rupture, choroideremia, chronic retinal detachment, coloboma of the retina, Drusen, endogenous Candida endophthalmitis, extrapapillary hamartomas of the retinal pigmented epithelium, fundus flavimaculatus, idiopathic, macular hole, malignant melanoma, membranoproliferative glomerulonephritis (type II), metallic intraocular foreign body, morning glory disc syndrome, multiple evanescent white-dot syndrome (MEWDS), neovascularization at ora serrata, operating

microscope burn, optic nerve head pits, photocoagulation, punctuate inner choroidopathy, rubella, sarcoidosis, serpiginous or geographic choroiditis, subretinal fluid drainage, tilted disc syndrome, Taxoplasma retinochoroiditis, tuberculosis, Vogt-Koyanagi-Harada syndrome, diabetic retinopathy, non-diabetic retinopathy, branch vein occlusion, central retinal vein occlusion, retinopathy in premature infants, rubeosis iridis, neovascular glaucoma, periofoveal telangiectasis, sickle cell retinopathy, Eale's disease, retinal vasculitis, Von Hippel Linau disease, radiation retinopathy, retinal cryoinjury, retinitis pigmentosa, retinochoroidal coloboma, corneal neovascularization due to herpes simplex keratitis, corneal ulcers, keratoplasty, pterygia, and trauma.

29. (Canceled)

30. (Previously Presented) The method according to claim 1, wherein the lentiviral vector is administered intraocularly.

31. (Previously Presented) The method according to claim 1, wherein the lentiviral vector is administered subretinally.

32. (Previously Presented) The method according to claim 1, wherein the lentiviral vector is administered intravitreally.

33-37. (Canceled)

38. (Previously Presented) The method of claim 1, wherein the lentiviral vector is a bovine immunodeficiency viral vector.

39. (Original) The method of claim 38, wherein the bovine immunodeficiency viral vector is administered intraocularly.

40. (Previously Presented) The method of claim 38, wherein the bovine immunodeficiency viral vector is administered subretinally.

41. (Previously Presented) The method of claim 38, wherein the bovine immunodeficiency viral vector is administered intravitreally.

42-44. (Canceled)

45. (Original) The method of claim 1, wherein said ocular neovascularization is retinal neovascularization.

46. (Original) The method of claim 1, wherein said ocular neovascularization is corneal neovascularization.

47. (Original) The method of claim 1, wherein said ocular neovascularization is iris neovascularization.

48-50. (Canceled)

51. (New) A method for ameliorating or reducing the rate of ocular choroidal neovascularization in an individual afflicted with ocular choroidal neovascularization, comprising:

directly administering to the eye or eyes of said individual a lentiviral vector that operably encodes and expresses a functionally active endostatin wherein said administering ameliorates or reduces the rate of ocular choroidal neovascularization.

52. (New) The method of claim 51, wherein the endostatin is a polypeptide with the amino acid sequence set forth in SEQ ID NO:1.

53. (New) The method of claim 51, wherein the endostatin is a functionally active polypeptide fragment of the polypeptide with the amino acid sequence set forth in SEQ ID NO:1, a functionally active derivative of the polypeptide with the amino acid sequence set forth in SEQ ID NO:1, or a functionally active variant of the polypeptide with the amino acid sequence set forth in SEQ ID NO:1.

54. (New) The method of claim 51, wherein endostatin-encoding nucleic acid in said lentiviral vector comprises the sequence set forth in SEQ ID NO:2.

55. (New) The method of claim 51, wherein the ocular choroidal neovascularization is caused by a member selected from the group consisting of macular degeneration,

histoplasmosis, pathological myopia, angioid streaks, anterior ischemic optic neuropathy, bacterial endocarditis, Best's disease, birdshot retinochoroidopathy, choroidal hemangioma, choroidal nevi, choroidal nonperfusion, choroidal osteomas, choroidal rupture, choroideremia, chronic retinal detachment, coloboma of the retina, Drusen, endogenous Candida endophthalmitis, extrapapillary hamartomas of the retinal pigmented epithelium, fundus flavimaculatus, idiopathic, macular hole, malignant melanoma, membranoproliferative glomerulonephritis (type II), metallic intraocular foreign body, morning glory disc syndrome, multiple evanescent white-dot syndrome (MEWDS), neovascularization at ora serrata, operating microscope burn, optic nerve head pits, photocoagulation, punctuate inner choroidopathy, rubella, sarcoidosis, serpiginous or geographic choroiditis, subretinal fluid drainage, tilted disc syndrome, Taxoplasma retinochoroiditis, tuberculosis, Vogt-Koyanagi-Harada syndrome, diabetic retinopathy, non-diabetic retinopathy, branch vein occlusion, central retinal vein occlusion, retinopathy in premature infants, rubeosis iridis, neovascular glaucoma, periofoveal telangiectasis, sickle cell retinopathy, Eale's disease, retinal vasculitis, Von Hippel Linau disease, radiation retinopathy, retinal cryoinjury, retinitis pigmentosa, retinochoroidal coloboma, corneal neovascularization due to herpes simplex keratitis, corneal ulcers, keratoplasty, pterygia, and trauma.

56. (New) The method according to claim 51, wherein the lentiviral vector is administered intraocularly.

57. (New) The method according to claim 51, wherein the lentiviral vector is administered subretinally.

58. (New) The method according to claim 51, wherein the lentiviral vector is administered intravitreally.

59. (New) The method of claim 51, wherein the lentiviral vector is a bovine immunodeficiency viral vector.

60. (New) The method of claim 59, wherein the bovine immunodeficiency viral vector is administered intraocularly.

61. (New) The method of claim 59, wherein the bovine immunodeficiency viral vector is administered subretinally.

62. (New) The method of claim 59, wherein the bovine immunodeficiency viral vector is administered intravitreally.